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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,635	03/30/2004	Ge Shi	004320.P072	3847

62294 7590 10/10/2007
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
1279 Oakmead Parkway
Sunnyvale, CA 94085-4040

EXAMINER

TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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10/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,635

Applicant(s)

SHI, GE

Examiner

Douglas Q. Tran

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

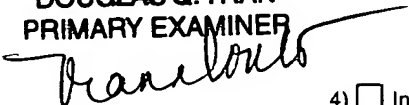
- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

DOUGLAS Q. TRAN
PRIMARY EXAMINER



Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-5, are drawn to a method of automatic white balancing characterized by determining an illuminant source by identifying a predefined white area of a color space diagram having a highest number of pixels and determining a gain adjustment based on the values of R, G, B.

II. Claims 6-7, are drawn to a method of identifying an illuminant source of a captured image characterized by calculating the ratios of G/R, G/B for **a pixel of the captured image** and plotting the ratios of G/R and G/B.

III. Claims 8-9, are drawn to method of determining a gain adjustment for automatic white balance characterized by determining a gain adjustment based on the values of R, G, B (without determining an illuminant source by identifying a predefined white area of a color space diagram having a highest number of pixels as in claim 1).

IV. Claims 10, are drawn to a method of automatic white balancing characterized by accumulating a R value, a G value, and Blue value for each the pixel that has the G/R ratio and G/B ratio inside a predefined white area of the color space diagram.

V. Claims 11-15, are drawn to a method of predefining a white area in a color space diagram characterized by calculating the ratios of G/R and G/B for **a white color block**, and determining a white area for each the illuminant type.

VI. Claims 16, are drawn to a method of predefining a white area in a color space diagram characterized by using a color chart having a plurality of color blocks including a white,

Art Unit: 2625

a gray 1 to gray 4 and a black color block under a target source and calculating the ratios of G/R and G/B for each the color block.

VII. Claims 17-20, are drawn to an apparatus for automatic white balance characterized by an area selection module for determining a predefined white area of a color space diagram for a pixel (not for a highest number of pixels that addressed in claim 1), and a decide gain value module for determining a gain adjustment (without based on any thing).

2. The inventions are distinct, each from the other because of the following reasons:

Inventions from I to VII are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if at least one subcombination is separately usable. In the instant case, each invention has separate utility such as operating either independently or in combination with other subcombinations according to the particular claimed limitations which characterize the invention, without requiring the particular limitations which characterize the other invention(s), as indicated above. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above, requiring separate consideration and search, restriction for examination purposes as indicated is proper.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103 of the other inventions.

Art Unit: 2625

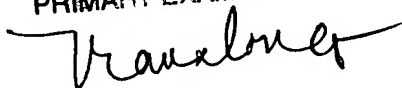
Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (571) 272-7442.

Oct. 01, 2007

DOUGLAS Q. TRAN
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Tran", is written over the printed name and title.